REMARKS

Applicants appreciate the notification of allowable subject matter, i.e., that claims 11-17 are merely objected to, and would be allowable if rewritten in independent form.

Claims 1-17 are pending in the application. Claims 1, 4, and 10 have been amended by the present amendment. The amendments are fully supported by the specification as originally filed (see, e.g., page 15, line 9 to page 16, line 9).

As an initial matter, the drawings were objected to because the reference sign 117 was missing from the description. The specification has been amended on page 41, line 9 to add "(step 117)" to the end of the sentence. Reference numeral 117 corresponds to the step of storing the address in EEPROM, as indicated in FIG. 4 and taught by the specification as originally filed. No new matter has been added.

The drawings were also objected to because FIG. 6 was missing a designation such as "Related Art." In FIG. 6, the phrase "Related Art" has been inserted as a legend, as recommended by the Examiner. In view of the above corrections, withdrawal of the drawing objections is respectfully requested.

Applicants' claimed invention is directed to a pixel defect detector for a solid-state imaging device, including a plurality of photoelectric transducers. A calculation section is provided for obtaining output characteristics of a subject photoelectric transducer based on varied amounts of incident light so as to determine the presence/absence of a defect in the subject photoelectric transducer. Claims 1 and 4 require determining the amount of light incident on the subject photoelectric transducer based on the output of the other "neighboring" photoelectric transducers.

Because the amount of light incident on the subject photoelectric transducer is calculated as described above, no reference light generator is required for use with the Applicants' invention.

Claims 1-3 were rejected under 35 USC 102(b) as being anticipated by U.S. Patent 4,602,291 to Temes. Claims 4, 8, and 9 were rejected under 35 USC 103(a) as being unpatentable over Temes in view of U.S. Patent 6,034,794 to Suganuma. Claims 5-7 and 10 also were rejected over the Temes, Suganuma, and/or other references. These rejections are respectfully traversed.

Temes fails to teach or suggest a pixel defect detector in which the amount of light incident on a subject photoelectric transducer is calculated based on outputs from neighboring photoelectric transducers.

Temes describes a system requiring a known illumination level (column 2, lines 64-66). Because the level of illumination is known in Temes, there is no need to determine the level of light based on the output of other transducers, as recited in the Applicants' claimed invention. Therefore, claims 1 and 4 of the Applicants' claimed invention are patentably distinguishable over the Temes reference.

With reference to claim 4, the Suganuma reference cannot be combined with Temes to produce the Applicants' claimed invention. Suganuma is directed to reproducing a high quality image in a scanner, for example.

In the Office Action, it was alleged that the motivation for combining Suganuma with Temes was to allow for the correction of defective pixels. However, this is the specific problem addressed by Temes (see Temes at column 1, lines 50-54). Therefore, because Temes has already addressed this problem, one of ordinary skill in the art would not look to Suganuma to solve the problem of defective pixels.

Moreover, the combination of Temes in view of Suganuma fails to teach or suggest determining the amount of light incident on a subject transducer based on the output of other transducers. As described above, the system of Temes requires light "of a uniform, known

illumination level" (column 2, lines 64-66). Therefore, claim 4 of the Applicants' invention is patentably distinguishable over the combination of Temes in view of Suganuma.

Regarding claims 7 and 8, in the Office Action it was alleged to be obvious to use a "near-overflow state" as the "predetermined level" in Temes, since a large variation in brightness give a more accurate result. For at least the reasons discussed above, Temes does not teach or suggest the pixel defect detector recited in claims 1 and 4. Moreover, the cited references do not teach or suggest that it is advisable to put the transducers in a "near-overflow" state.

Regarding claim 10, in accordance with the Applicants' claimed invention, by setting the variable y_o as a median among outputs from the plurality of transducers, light incident on the subject photoelectric transducer can be calculated, and need not be predetermined (see page 15, line 9 to page 16, line 9). In the Office Action, it was alleged that the digital median filter of Fossum teaches the feature recited in claim 10. However, in Temes, if the output of the pixel being tested is averaged with surrounding pixels, the correction required would be difficult or impossible to detect, as the presence of working pixels would reduce the detectability of an error. As such, the cited combination of references would render the invention inoperable.

It is believed the application is in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

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